

B'



# 9B

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# SEQUENCE LISTING

<110> Wu, Hongjiang  
Crooke, Stanley T.

<120> Human RNase III and Compositions and Uses Thereof

<130> ISPH-0522

<140> US 09/900,425

<141> 2001-07-06

<150> US 09/479,783

<151> 2000-01-07

<150> US 08/870,608

<151> 1997-06-06

<150> US 80/659,440

<151> 1996-06-06

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<170> PatentIn version 3.1

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His Ser Thr Lys Asp Asp Val Asn Leu Val Ile Pro Gly Ser Thr Trp  
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Ser His Ile Glu Gly Val Tyr Glu Met Leu Lys Ser Arg His Asp Arg  
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Gln Asn Glu Pro Val Ile Glu Glu Pro Ser Ser His Pro Lys Asn Gln  
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Lys Phe Pro Gln Met Asp Glu Gly Ser Leu Ser Lys Leu Arg Ala Lys  
 195 200 205

Phe Val Gly Asn Glu Ser Ala Asp Lys Phe Ala Arg Leu Tyr Gly Phe  
 210 215 220  
 Asp Lys Thr Leu Val Leu Ser Tyr Ser Ala Glu Lys Asp Gln Leu Arg  
 225 230 235 240  
 Lys Ser Gln Lys Val Ile Ala Asp Thr Phe Glu Ala Tyr Leu Gly Ala  
 245 250 255  
 Leu Ile Leu Asp Gly Gln Glu Glu Thr Ala Phe Gln Trp Val Ser Arg  
 260 265 270  
 Leu Leu Gln Pro Lys Ile Ala Asn Ile Thr Val Gln Arg Pro Ile Asp  
 275 280 285  
 Lys Leu Ala Lys Ser Lys Leu Phe His Lys Tyr Ser Thr Leu Gly His  
 290 295 300  
 Ile Glu Tyr Arg Trp Pro Ala Cys Val Asp Gly Ala Gly Gly Ser Ala  
 305 310 315 320  
 Glu Gly Tyr Val Ile Ala Cys Ile Phe Asn Gly Lys Glu Val Ala Arg  
 325 330 335  
 Ala Trp Gly Ala Asn Gln Lys Asp Ala Gly Ser Arg Ala Ala Met Gln  
 340 345 350  
 Ala Leu Glu Val Leu Ala Lys Asp Tyr Ser Lys Phe Ala Arg  
 355 360 365

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 <213> *Saccharomyces.cerevisiae*

<400> 5

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 Leu Asp Asn Glu Asn Gly Ser Gln Gln Arg Glu Asn Ile Asn Thr Lys  
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 Thr Leu Leu Lys Gly Asn Leu Lys Ile Ser Asn Tyr Lys Tyr Leu Glu  
 35 40 45  
 Val Ile Gln Leu Glu His Ala Val Thr Lys Leu Val Glu Ser Tyr Asn  
 50 55 60  
 Lys Ile Ile Glu Leu Ser Pro Asn Leu Val Ala Tyr Asn Glu Ala Val  
 65 70 75 80  
 Asn Asn Gln Asp Arg Val Pro Val Gln Ile Leu Pro Ser Leu Ser Arg  
 85 90 95  
 Tyr Gln Leu Lys Leu Ala Ala Glu Leu Lys Thr Leu His Asp Leu Lys  
 100 105 110

Lys Asp Ala Ile Leu Thr Glu Ile Thr Asp Tyr Glu Asn Glu Phe Asp  
 115 120 125  
 Thr Glu Gln Lys Gln Pro Ile Leu Gln Glu Ile Ser Lys Ala Asp Met  
 130 135 140  
 Glu Lys Leu Glu Lys Leu Glu Gln Val Lys Arg Glu Lys Arg Glu Lys  
 145 150 155 160  
 Ile Asp Val Asn Val Tyr Glu Asn Leu Asn Glu Lys Glu Asp Glu Glu  
 165 170 175  
 Glu Asp Glu Gly Glu Asp Ser Tyr Asp Pro Thr Lys Ala Gly Asp Ile  
 180 185 190  
 Val Lys Ala Thr Lys Trp Pro Pro Lys Leu Pro Glu Ile Gln Asp Leu  
 195 200 205  
 Ala Ile Arg Ala Arg Val Phe Ile His Lys Ser Thr Ile Lys Asp Lys  
 210 215 220  
 Val Tyr Leu Ser Gly Ser Glu Met Ile Asn Ala His Asn Glu Arg Leu  
 225 230 235 240  
 Glu Phe Leu Gly Asp Ser Ile Leu Asn Ser Val Met Thr Leu Ile Ile  
 245 250 255  
 Tyr Asn Lys Phe Pro Asp Tyr Ser Glu Gly Gln Leu Ser Thr Leu Arg  
 260 265 270  
 Met Asn Leu Val Ser Asn Glu Gln Ile Lys Gln Trp Ser Ile Met Tyr  
 275 280 285  
 Asn Phe His Glu Lys Leu Lys Thr Asn Phe Asp Leu Lys Asp Glu Asn  
 290 295 300  
 Ser Asn Phe Gln Asn Gly Lys Leu Lys Leu Tyr Ala Asp Val Phe Glu  
 305 310 315 320  
 Ala Tyr Ile Gly Gly Leu Met Glu Asp Asp Pro Arg Asn Asn Leu Pro  
 325 330 335  
 Lys Ile Arg Lys Trp Leu Arg Lys Leu Ala Lys Pro Val Ile Glu Glu  
 340 345 350  
 Ala Thr Arg Asn Gln Val Ala Leu Glu Lys Thr Asp Lys Leu Asp Met  
 355 360 365  
 Asn Ala Lys Arg Gln Leu Tyr Ser Leu Ile Gly Tyr Ala Ser Leu Arg  
 370 375 380  
 Leu His Tyr Val Thr Val Lys Lys Pro Thr Ala Val Asp Pro Asn Ser  
 385 390 395 400  
 Ile Val Glu Cys Arg Val Gly Asp Gly Thr Val Leu Gly Thr Gly Val  
 405 410 415  
 Gly Arg Asn Ile Lys Ile Ala Gly Ile Arg Ala Ala Glu Asn Ala Leu  
 420 425 430

Arg Asp Lys Lys Met Leu Asp Phe Tyr Ala Lys Gln Arg Ala Ala Ile  
 435 440 445

Pro Arg Ser Glu Ser Val Leu Lys Asp Pro Ser Gln Lys Asn Lys Lys  
 450 455 460

Arg Lys Phe Ser Asp Thr Ser  
 465 470

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<212> PRT

<213> Escherichia coli

<400> 6

Met Asn Pro Ile Val Ile Asn Arg Leu Gln Arg Lys Leu Gly Tyr Thr  
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Phe Asn His Gln Glu Leu Leu Gln Gln Ala Leu Thr His Arg Ser Ala  
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Ser Ser Lys His Asn Glu Arg Leu Glu Phe Leu Gly Asp Ser Ile Leu  
 35 40 45

Ser Tyr Val Ile Ala Asn Ala Leu Tyr His Arg Phe Pro Arg Val Asp  
 50 55 60

Glu Gly Asp Met Ser Arg Met Arg Ala Thr Leu Val Arg Gly Asn Thr  
 65 70 75 80

Leu Ala Glu Leu Ala Arg Glu Phe Glu Leu Gly Glu Cys Leu Arg Leu  
 85 90 95

Gly Pro Gly Glu Leu Lys Ser Gly Gly Phe Arg Arg Glu Ser Ile Leu  
 100 105 110

Ala Asp Thr Val Glu Ala Leu Ile Gly Gly Val Phe Leu Asp Ser Asp  
 115 120 125

Ile Gln Thr Val Glu Lys Leu Ile Leu Asn Trp Tyr Gln Thr Arg Leu  
 130 135 140

Asp Glu Ile Ser Pro Gly Asp Lys Gln Lys Asp Pro Lys Thr Arg Leu  
 145 150 155 160

Gln Glu Tyr Leu Gln Gly Arg His Leu Pro Leu Pro Thr Tyr Leu Val  
 165 170 175

Val Gln Val Arg Gly Glu Ala His Asp Gln Glu Phe Thr Ile His Cys  
 180 185 190

Gln Val Ser Gly Leu Ser Glu Pro Val Val Gly Thr Gly Ser Ser Arg  
 195 200 205

Arg Lys Ala Glu Gln Ala Ala Ala Glu Gln Ala Leu Lys Lys Leu Glu  
 210 215 220

Leu Glu  
225

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cggatcatta aagagcaagc

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<400> 12  
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<210> 13  
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<210> 14  
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 <212> DNA  
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<210> 15  
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<210> 16  
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<210> 17  
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<210> 18  
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<400> 19  
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<210> 20  
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<400> 20  
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<210> 21  
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<400> 21  
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<210> 22  
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<400> 22  
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<210> 23  
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<400> 23  
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<210> 24  
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<400> 24  
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<210> 25  
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<400> 25  
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<210> 26  
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<220>  
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<400> 26  
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<210> 27  
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<220>  
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<400> 27  
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<210> 28  
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<210> 30  
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<400> 30  
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<210> 31  
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<400> 31  
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<210> 33  
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<400> 33  
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<210> 34  
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<400> 34  
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<210> 35  
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<400> 35

Cys Arg Ser Asp Tyr Asp Arg Gly Arg Thr Pro Ser Arg His Arg Ser  
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Tyr Glu Arg Ser  
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<210> 36  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 36

Cys Arg Trp Glu Arg Glu His Gln Glu Arg Glu Pro Asp Glu Thr Glu  
 1 5 10 15

20

Asp Ile Lys Lys  
20